

## REMARKS/ARGUMENTS

### *Status of the Application*

In the Final Office Action, Claims 1-3, 6, 8, 10, and 13 were rejected. In the present response, no amendments to the claims were made. Thus, Claims 1-3, 6, 8, 10, and 13 are pending. No new matter was added.

### *Rejections Under 35 U.S.C. § 103(a)*

Claims 1-3, 6, 10, and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Maag et al. (DE-A-197 57 082, WO 99/26733, or U.S. Patent No. 6,531,188) in view of Richard (U.S. Patent No. 5,091,211). Applicants respectfully traverse these rejections.

Even though the Examiner has repeatedly asserted that Maag et al. in view of Richard establishes a *prima facie* case of obviousness, such repetition does not change the fact that those disclosures do not teach or suggest a reactive diluent comprising at least one (meth)acrylic acid ester being formed by reacting (meth)acrylic acid with at least one cycloaliphatic alcohol. Contrary to the Examiner's assertions, the fillers in Maag et al. are not produced via reacting (meth)acrylic acid with at least one cycloaliphatic alcohol (see Statement 4 of the Löffler declaration, submitted along with the response to the June 22, 2005, Non-Final Office Action). The Examiner either ignored or disregarded Statement 4 of the 132 declaration where Mr. Löffler concluded that the Examiner's assertion that Maag et al. disclose cycloaliphatic (meth)acrylates is incorrect. Applicants see no evidence in the present office action, or in any other office action, demonstrating that Mr. Löffler's statement is false or is only an opinion (which it is not, as evidenced by Maag et al. itself at col. 2, line 62 – col. 3, line 9). Thus, the Examiner's bare assertion that the fillers in Maag et al. are produced via reacting (meth)acrylic acid with at least one cycloaliphatic alcohol, and in turn the Examiner's *prima facie* case, cannot stand.

To illustrate, Maag et al. disclose that several (meth)acrylates such as polyurethane (meth)acrylates, epoxy (meth)acrylates, (meth)acrylic-functional (meth)acrylic copolymers, etc. can be used as prepolymers (polymers or oligomers) (see col. 2, line 65 – col. 3, line 4). These prepolymers contain, as the term "prepolymers" implies, (meth)acrylic ester groups as unsaturated groups. Further,

these prepolymers have a molar mass of 200 to 10,000, and they contain 2 to 20 double bonds per molecule (whereas the reactive diluents of Applicants' claimed invention are definitely monounsaturated). The main criterion to distinguish between, e.g., oligomeric prepolymers (composed of 2 to about 5 monomer units) and monomeric reactive diluents is the capability of the latter to function as solvents (liquid monomers with an appropriate viscosity) for the prepolymers. Thus, the prepolymers of Maag et al. are not reactive diluents (liquid monomers) even if the lower limit of molar mass is quite low and could overlap with the molar mass of specific reactive diluents.

The term "aliphatic and/or cycloaliphatic (meth)acrylates are preferably used" at col. 3, lines 8-9, of Maag et al. clearly means that the (meth)acrylic ester groups in the prepolymers mentioned above are preferably aliphatic and/or cycloaliphatic (meth)acrylic ester groups. It does not mean that monomeric (meth)acrylic esters are used as prepolymers; such a meaning would be a contradiction in terms. Therefore, there is no relationship between the term "aliphatic and/or cycloaliphatic (meth)acrylates" at col. 3, lines 8-9, and the reactive diluents mentioned at col. 3, lines 18-20 (examples of monounsaturated reactive diluents are (meth)acrylic acid and esters thereof).

With regard to the comparative examples, Maag et al. discloses as monounsaturated reactive diluents any (meth)acrylic ester, whereas Applicants demonstrated that using (meth)acrylic ester of cycloaliphatic alcohols (specifically isobornyl acrylate) provides advantages over using esters of aliphatic alcohols (hydroxy and non-hydroxy functional esters). In presenting comparative examples, Applicants selected two compounds which most represent the Maag et al. disclosure in combination with Richard and Brehm et al. (U.S. Patent No. 5,700,576). These compounds, 2-hydroxy ethyl methacrylate and methyl methacrylate, are in Brehm et al.'s list of reactive thinners (see col. 5, lines 54-59), and comport with Maag et al.'s definition of a reactive diluent (see col. 3, lines 14-35). In light of the fact that the comparative examples did not even cure (see Statement 8 of the Löffler declaration, submitted along with the response to the June 22, 2005, Non-Final Office Action), requiring the Applicants to do further experiments with additional component B) compounds covered by claim 1 and/or additional compounds listed in Brehm et al. would simply be cumulative of the evidence already before the Examiner. Applicants

thus respectfully submit that they have produced sufficient evidence to rebut the Examiner's asserted *prima facie* case of obviousness and request allowance of all claims over Maag et al. in view of Richard in further view of Brehm et al.

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Maag et al. in view of Richard in further view of Brehm et al. Applicants are confused as to why the 132 declaration was insufficient to overcome the rejection of claim 8. Claim 8 is specifically directed to isobornyl (meth)acrylate as component B). Thus, the claim covers a genus for component B) having two essentially interchangeable constituents: isobornyl acrylate and isobornyl methacrylate. By demonstrating the superiority of an essentially interchangeable constituent of a genus over the prior art, Applicants respectfully submit that production of evidence of superiority of the other constituent of the genus would be merely cumulative of evidence already before the Examiner. As such, Applicants respectfully submit that claim 8 is allowable over Maag et al. in view of Richard in further view of Brehm et al.

Further, Applicants disagree with the Examiner's assertion that whether a substrate is plastic or metal is irrelevant. The substrate material is not irrelevant. The automobile parts mentioned in Brehm et al. at col. 6, line 42, are molded articles which are formed of thermoplastic materials (see col. 6, lines 33-42). Therefore, the teaching of Brehm et al. is directed to coating agents for plastic substrates. Adhesion as well as other properties of coating compositions on plastics and on metal are not comparable. Thus, Applicants reiterate that there is no motivation or suggestion to combine Brehm et al. with Maag et al. and Richard.

**Summary**

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. In order to expedite disposition of this case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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